

Vegetable Crop Pest Management

INTRODUCTION	v
CHAPTER 1: INTEGRATED PEST MANAGEMENT	
Integrated Pest Management	1
Field Scouting, Monitoring	1
Economic Thresholds	2
Control Strategies	2
Cultural Control	2
Biological Control	3
Chemical Control	5
Review Questions	6
CHAPTER 2: MINIMIZING PESTICIDE IMPACT ...	
State and Federal Laws	9
Guidelines for Selecting and Using Pesticides	9
Protecting Our Groundwater	10
Keeping Pesticides Out of Groundwater and Surface Water	10
Protecting Non-target Organisms	11
Potential for Pesticide Resistance	12
The Development of Resistance	12
Resistance Management	13
Notifying Neighbors	13
Review Questions	14
CHAPTER 3: APPLICATION EQUIPMENT	
Methods of Application	17
Types of Sprayers	17
Parts of a Sprayer	18
Tanks	18
Agitators	18
Pumps	18
Strainers	19
Hoses	19
Pressure Regulators	19
Pressure Gauge	19
Nozzles	20
Operation and Maintenance of Sprayers	20
Before Spraying	20
During Spraying	21
After Spraying	21
Granular Applications	21
Field Operations	21
Global Positioning System and Geographical Information System	21
Review Questions	22
CHAPTER 4: CALIBRATION	
Introduction	25
Calibration of Sprayers	25
Variables that Determine the Spray Rate	25
Precalibration Check of Nozzle Output	26
Spray Pattern Uniformity	26
Broadcast Sprayer Calibration	27
Amount of Pesticide to Add to Tank	28
Granular Applicator Calibration	28
Review Questions	30
CHAPTER 5: INSECT MANAGEMENT	
Growth and Development	33
Considerations for Pest Management	34
Insect Pests of Asparagus	34
Asparagus beetles	34
Asparagus miner	34
Cutworms	35
Insect Pests of Carrots	35
Aster leafhopper	35
Carrot weevil	35
Insect Pests of Celery	36
Aster leafhopper and carrot weevil	36
Green peach aphid and sunflower aphid	36
Celery looper and cabbage looper	36
Tarnished plant bug	37
Variegated cutworm	37
Insect Pests of Cucurbits	38
Aphids	38
Cucumber beetles	38
Squash bug	38
Insect Pests of Cole Crops	39
Imported cabbageworm	39
Cabbage looper	40
Diamondback moth	40
Cabbage maggots	41
Insect Pests of Corn (Sweet)	41
Corn flea beetle	41
European corn borer	41
Corn earworm	42
Fall armyworm	43
Insect Pests of Onions	43
Onion maggot	43
Onion thrips	44
Insect Pests of Potatoes	44
Colorado potato beetle	44
Potato leafhopper	45
Green peach aphid and potato aphid	45
Insect Pests of Snap Beans	45
Potato leafhoppers	45
Tarnished plant bug	45
European corn borer	46
Insect Pests of Tomatoes	46
Colorado potato beetle	46
Tomato hornworm	46
Tomato fruitworm	47